



L6363

PRML READ/WRITE CHANNEL

PRODUCT PREVIEW

■ SIGNAL PROCESSING

- PR4 signal equalization and loops
- 8th order optimized low pass filter with programmable cut-off frequency and boost
- single flash 6-bit ADC
- 5-TAP programmable/self-adaptive digital FIR for signal equalization
- Programmable/self-adaptive Offset and MR Head Asymmetry compensation for signal equalization
- Timing and Gain loops for optimum data recovery
- Encoder scheme:
 - Rate 304/338 with Local ECC (16/17 without Local ECC)
- Detector scheme:
 - Media Noise Terminator™ Detector
 - Optional Local ECC Post Processing scheme
- 8-bit NRZ interface to disk controller
- Thermal Asperity detection/compensation and Erasure Flag

■ WRITE

- 2 level Write Precomp for Non Linear Transition Shift compensation
- Asynchronous and Synchronous Direct Write for disk/head characterization

■ SERVO

- Digital Synchronous Servo with data rates up to 75MHz (8x Oversampling)
- Internal Burst and Grey Code detection
- Repeatable Run Out Support



■ CHANNEL QUALITY MONITOR

- Fast read parameters optimization for minimum BER
- Advanced Disk Surface Defect Scan

■ QUALITY AND RELIABILITY

- BIST for analog front-end and digital back-end
- Iddq and I/O pins mapping

■ POWER SUPPLY AND CONTROL

- 2.5V Analog and 1.8V Digital supply; 1.8V to 3.3V supply for I/O pins
- Advanced Power Management features

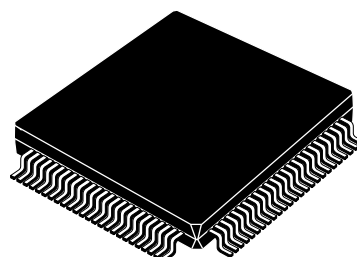
DESCRIPTION

L6363 is a 0.18μm CMOS PRML R/W channel supporting data rates up to 750Mb/sec with Servo Demodulation, Clock Synthesis, Channel Quality Monitor for channel optimization and Disk Surface Defect Scan capability

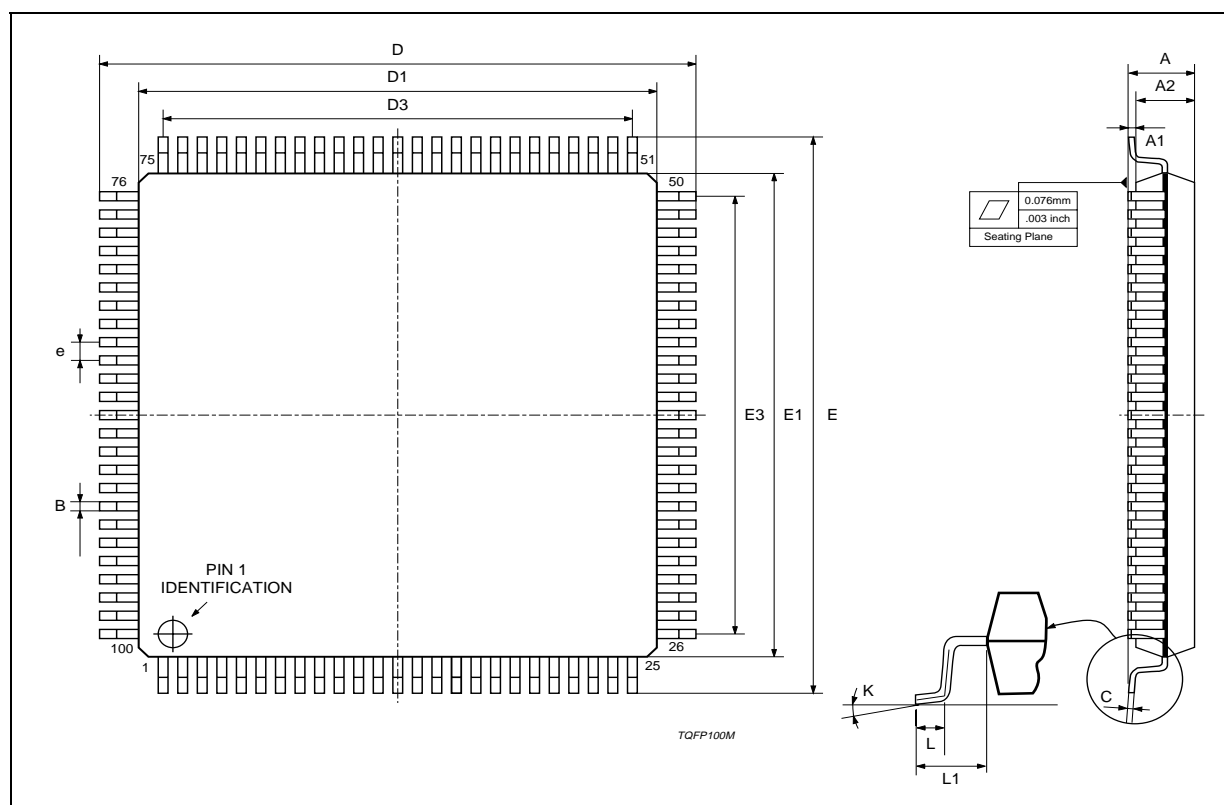


DIM.	mm			inch		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A			1.60			0.063
A1	0.05		0.15	0.002		0.006
A2	1.35	1.40	1.45	0.053	0.055	0.057
B	0.17	0.22	0.27	0.007	0.009	0.011
C	0.09		0.20	0.003		0.008
D		16.00			0.630	
D1		14.00			0.551	
D3		12.00			0.472	
e		0.50			0.019	
E		16.00			0.630	
E1		14.00			0.551	
E3		12.00			0.472	
L	0.45	0.60	0.75	0.018	0.024	0.030
L1		1.00			0.0393	
K	3.5°(min.), 7°(max.)					

OUTLINE AND MECHANICAL DATA



TQFP100



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